

REMARKS

By the present amendment, independent claims 1, 2 and 7 have been amended to obviate the examiner's objections thereto and/or to further clarify the concepts of the present invention. In particular, these claims have been amended to be further defined according to the disclosure at the bottom of page seven of the subject specification. In addition, dependent claim 5 has been amended and claims 10-14 have been added. Entry of these amendments is respectfully requested.

In the Office Action, claims 1, 4/1, 6 and 8 were rejected under 35 USC § 103(a) as being unpatentable over the previously cited patents to Johnson et al and Ikeda et al further in view of the patent to Mittendorf. In making this rejection, it was asserted that the Johnson et al patent teaches the entire fluid control apparatus as set forth in the noted claims with the exception of the provisions of (1) a tape heater on opposite sides of the line and (2) the tape heaters being held with a resilient force of a clip. The Ikeda et al patent was then cited to allegedly supply the first teaching deficiency and the patent to Mittendorf was cited as supplying the second teaching deficiency. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

It is submitted that the cited Johnson et al, Ikeda et al and Mittendorf patents, whether taken singly or in combination, do not teach or suggest a fluid control apparatus as defined by amended claims 1 and 2. More particularly, it is submitted that these patents do not teach or suggest, among other things, the distinguishing characteristic of a base member in the form of a frame comprising a plurality of lateral rails extending in a direction orthogonal to the lines in a subject fluid control apparatus as presently claimed.

It is further submitted that the newly cited patent to Mittendorf does not supply the above noted teaching deficiencies. In this regard, it is to be further noted that the clip according to the Mittendorf patent fixes the rod-like heater, and does not hold the tape heater to the block body of the fluid control apparatus. Accordingly, "the line" in present claim 1 has been amended to recite "block bodies of the fluid control devices."

Moreover, the clip of the Mittendorf patent is different from the present invention also in shape of the clip, since the clip of the patent is C-shaped while that of the presently claimed invention is U-shaped.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of claims 1, 4/1 and 6 as amended over the cited patents are respectfully requested.

Dependent claim 3 was rejected under 35 USC § 103(a) as being unpatentable over the above cited patents to Johnson et al, Ikeda et al and Mittendorf further in view of the patent to Lengstorf. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Inasmuch as this rejection is based on basically the same patents as discussed in the above rejection, it is submitted that the rejection has been overcome for the reasons discussed above over combination of the first three of the cited patents.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of dependent claim 3 over the cited patents are respectfully requested.

Independent claim 2 was rejected under 35 USC § 103(a) as being unpatentable over the above patent to Johnson et al in view of the patent to Lengstorf. In making this rejection, the Johnson et al patent was relied upon as above and then it was asserted that the Lengstorf patent teaches the use of a support member having a heater insertion bore along the length thereof and a sheath heater inserted in the bore without insulation. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

As in the above rejection of claim 1, it is submitted that neither patent teaches a

base member in the form of a frame comprising a plurality of lateral rails extending in a direction orthogonal to the lines in a subject fluid control apparatus as presently claimed in the subject application. In addition, it is submitted, as was done in the last response, that the patent to Lengstorf does not have the structure composed of an upper stage, a lower stage, a line support member and a base member as is presently claimed.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claim 2 over the cited patents are respectfully requested.

Claims 2-5 and 7 were rejected the above cited patent to Johnson et al in view of the above cited patents to Ikeda et al and Lengstorf. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Since this rejection is based on the same patents as discussed above, it is submitted this rejection is inapplicable on the same basis as the above rejection over combinations of two of the cited patents.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of claims 2-5 and 7 as amended over the cited patents are respectfully requested.

Applicants acknowledge with appreciation the indication that claim 9 would be allowable if rewritten in independent form.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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